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PTO/SB/21 (09-04)
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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/063,779	
	Filing Date	05/12/2002	
	First Named Inventor	Kay Ming Lee	
	Art Unit	1756	
	Examiner Name	SALEHA R. MOHAMED	
Total Number of Pages in This Submission	11	Attorney Docket Number	NAUP0469USA

Certificate

MAR 01 2006

Office of Correction

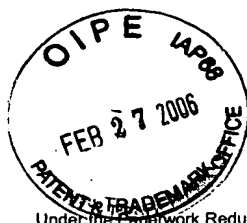
ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Terminal Disclaimer	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Request for Refund	1. A copy of the front page of Patent No. 6,974,650
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> CD, Number of CD(s) _____	2. A copy of the original Declaration
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> Landscape Table on CD	3. A copy of the original Assignment
<input type="checkbox"/> Reply to Missing Parts/Incomplete Application	Remarks	4. Supplemental application data sheet
<input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	Request for Certificate of Correction	

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	North America Intellectual Property Corporation		
Signature	<i>Winston Hsu</i>		
Printed name	Winston Hsu		
Date	FEB 24 2006	Reg. No.	41,526

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:			
Signature	<i>Alison Wu</i>		
Typed or printed name	Alison Wu	Date	FEB 24 2006

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/17 (12-04)
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Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 100.00

Complete if Known

Application Number	10/063,779
Filing Date	05/12/2002
First Named Inventor	Kay Ming Lee
Examiner Name	SALEHA R. MOHAMEDULLA
Art Unit	1756
Attorney Docket No.	NAUP0469USA

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____
☒ Deposit Account Deposit Account Number: **50-3105** Deposit Account Name: North America Intellectual Property Corp.

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee
☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

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FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims **Extra Claims** **Fee (\$)** **Fee Paid (\$)** **Multiple Dependent Claims**
_____ - 20 or HP = _____ x _____ = _____
Fee (\$) Fee Paid (\$)
HP = highest number of total claims paid for, if greater than 20
Indep. Claims **Extra Claims** **Fee (\$)** **Fee Paid (\$)**
_____ - 3 or HP = _____ x _____ = _____
HP = highest number of independent claims paid for, if greater than 3

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets **Extra Sheets** **Number of each additional 50 or fraction thereof** **Fee (\$)** **Fee Paid (\$)**
_____ - 100 = _____ / 50 = _____ (round up to a whole number) x _____ = _____

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other: Request for Certificate of Correction

Fees Paid (\$)

100.00

SUBMITTED BY

Signature	<i>Winston Hsu</i>	Registration No. (Attorney/Agent)	41,526	Telephone	302-729-1562
Name (Print/Type)	Winston Hsu	Date	FEB 24 2006		

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Respectfully submitted,

Winston Hsu

Date: FEB 24 2006

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US006974650B2

(12) **United States Patent**
Lee et al.

(10) **Patent No.:** **US 6,974,650 B2**
 (45) **Date of Patent:** **Dec. 13, 2005**

(54) **METHOD OF CORRECTING A MASK LAYOUT**

(75) **Inventors:** Kay Ming Lee, Pai (SC); Cheng-Wen Fan, Hsin-Chu (TW); Jiunn-Ren Hwang, Hsin-Chu (TW); Chih-Chiang Liu, Hsin-Chu (TW)

(73) **Assignee:** United Microelectronics Corp., Hsin-Chu (TW)

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 297 days.

(21) **Appl. No.:** 10/063,779

(22) **Filed:** May 12, 2002

(65) **Prior Publication Data**

US 2003/0211398 A1 Nov. 13, 2003

(51) **Int. Cl.** G03F 9/00

(52) **U.S. Cl.** 430/5; 430/30

(58) **Field of Search** 430/30, 5, 22; 382/144

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,879,844 A * 3/1999 Yamamoto et al. 430/30
 5,916,716 A * 6/1999 Butsch et al. 430/30
 6,120,953 A * 9/2000 Lin 430/30
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 6,586,146 B2 * 7/2003 Chang et al. 430/30

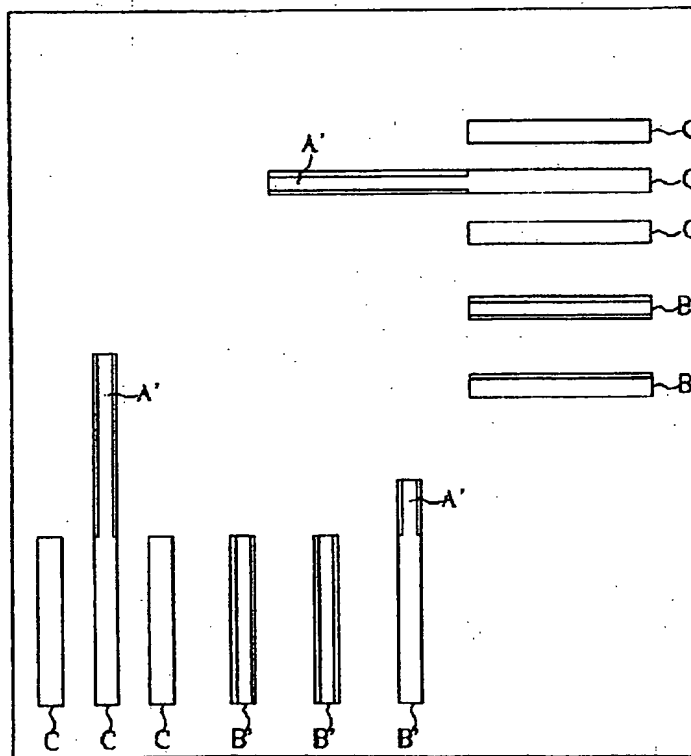
* cited by examiner

Primary Examiner—Saleha R. Mohamedulla
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(57) **ABSTRACT**

A method of correcting a mask layout is provided. The mask layout includes a plurality of element patterns. An inspection program is executed to classify the element patterns of the mask layout into a plurality of element pattern types according to a pattern density of the element patterns. Following this, each of the element pattern types is corrected so as to prevent a plasma micro-loading effect.

17 Claims, 6 Drawing Sheets



COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor , I hereby declare that :

I believe I am the sole (if only one name appears below) , or joint (if more than one name appears) , original and first inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled :

"METHOD OF CORRECTING A MASK LAYOUT"

+ The specification for the above entitled invention is filed herewith.

_____ The specification for the above entitled invention was filed previously
with application serial number: _____ Filing Date: _____

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of the invention disclosed in this application in accordance with Title 37, Code of Federal Regulations, Section 1.56 (a). I further acknowledge the duty in any continuation-in-part application to disclose to the Patent and Trademark Office all information known to be material to the patentability of the invention disclosed in this application, as defined in 1.56, which became available to me between the filing date of the prior application and the filing date of this application.

PRIORITY CLAIM

† There is no claim of priority

Claim of priority is based on the following:

POWER OF ATTORNEY

As a named inventor, I hereby appoint the following attorneys to prosecute this application and to transact all related business in the Patent and Trademark Office:

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DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued hereon.

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R.O.C.

ASSIGNMENT OF INVENTION

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration.

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Hereby sells, assigns and transfers to **UNITED MICROELECTRONICS CORP.**
(hereinafter 'Assignee'), of (Assignee address)

No. 3, Li-Hsin Road 2, Science-Based Industrial Park

, and the successors assigns and legal representatives of the ASSIGNEE the entire right, title, and interest in and to any and all improvements which are disclosed in the invention entitled:

"METHOD OF CORRECTING A MASK LAYOUT"

"

Which is found in :

- (a) _____ U.S. patent application executed on even date
- (b) _____ U.S. patent application executed on _____
- (c) _____ U.S. application serial no. _____
- (d) _____ patent no. _____ issued _____

and, in and to, all Letters Patent to be obtained for said invention by the above application or ant continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof

ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the proposes thereof.

IN WITNESS WHEREOF, We have hereunto set hand and seal this 05/06/2002 (Date of signing).

(Type name of inventor)

KAY MING LEE

Cheng-Wen Fan

Jiunn-Ren Hwang

Chih-Chiang Liu

Signature of INVENTOR

Lee Kay Ming

Cheng-Wen Fan

Hwang Jiunn-Ren

Liu, Chih-Chiang

SUPPLEMENTAL APPLICATION DATA SHEET

Electronic Version 0.0.11

Stylesheet Version: 1.0

Attorney Docket Number: NAUP0469USA

Publication Filing Type: **new-utility**

Application Type: **utility**

Title of Invention: **METHOD OF CORRECTING A MASK LAYOUT**

Customer Number Attorney: 027765

027765

Customer Number Correspondence Address: 027765

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